

Calendar

Dawn Patrols and Aviation Calendar

If your organization or club is planning a Dawn Patrol or an event you wish to have published, please call the Bureau of Aeronautics at 517-335-9915. **Deadline for the Dawn Patrol issue is February 28, 2002.** Information needed for publication includes: date of event, associated city/airport name, type of event, comments or associated event, sponsoring organization, contact person and telephone number. This information may be faxed to 517-321-6422 Attn: R. Riffel, e-mailed to riffelr@michigan.gov, or mailed to:

Calendar
Michigan Aviation, Bureau of Aeronautics
2700 E. Airport Service Drive
Lansing, Michigan 48906-2160

John Engler, Governor

MICHIGAN AERONAUTICS COMMISSION

Robert Bender, Chair - Middleville
Fred Rakunas, ViceChair - Eastport
Sidney Adams, Jr., Battle Creek
Alice J. Gustafson, Pontiac
Lowell E. Kraft, Pigeon

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Michigan Department of Transportation

Capt. John Ort
Michigan State Police

Brigadier General Ronald L. Seely
Michigan Department of Military Affairs

Guy Gordon
Michigan Department of Natural Resources

William E. Gehman, Director
Michigan Aeronautics Commission

Barbara Burris
Executive Assistant to the Commission

Kenneth Schaschl - Editor
MDOT Specialized Technology/Graphics - Graphic Design

2002 MICHIGAN AERONAUTICS COMMISSION MEETING SCHEDULE

Adopted by the Michigan Aeronautics Commission on November 28, 2001, to comply with the Open Meetings Act No. 267, P.A. 1976. Any individuals needing special assistance to attend these meetings should contact the Aeronautics Commission Office.

All Lansing meetings will be held at 10:00 a.m. in the Bureau of Aeronautics Auditorium, 2700 East Airport Service Drive, Lansing. Information regarding the actual meeting place and time for out-of-town meetings will be published prior to the meetings.

For further information about the agenda, minutes or meetings, please contact the Executive Assistant to the Aeronautics Commission at 517-335-9943.

2002 REGULAR MEETING SCHEDULE

MARCH 28, 2002 ¹ LANSING
MAY 15, 2002 GROSSE ILE
JULY 17, 2002 ALPENA
SEPTEMBER 11, 2002 ² SAULT STE. MARIE
NOVEMBER 20, 2001 LANSING

¹) Joint Meeting with the Michigan State Transportation Commission;

²) Joint Meeting with the Michigan Association of Airport Executives.

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COMMISSION ACTION

The Michigan Aeronautics Commission convened a special meeting on October 25, 2001 at the Detroit Metropolitan Airport in conjunction with the State Transportation Commission. The Aeronautics Commission met again on November 28, 2001 at a regularly scheduled meeting. Among the items acted upon at the two meetings was the approval of several airport improvement projects. Some projects have federal, state, and local funding, while others are funded from state and/or local sources alone. Commission approval for federally funded projects authorizes state participation, subject to issuance of a federal grant. Federal and state dollars for airport development are primarily from restricted, user generated funds. The primary sources of revenue are aviation fuel and passenger taxes, as well as aircraft registration fees. Following are the approved projects:

FLINT

Bishop International Airport - an allocation of \$666,667 for the purchase of an airport rescue and fire fighting vehicle. The proposed budget consists of \$600,020 federal and \$66,647 local funds.

HOWELL

Livingston County Airport - an allocation of \$314,000 for design work to relocate Tooley Road and preparation of a new hangar site. The proposed budget consists of \$282,600 federal, \$15,700 state, and \$15,700 local funds.

MARSHALL

Brooks Field - an allocation of \$28,000 for the design of a new taxiway and apron. The proposed budget consists of \$25,200 federal, \$1,400 state, and \$1,400 local funds.

THREE RIVERS

Three Rivers Municipal, Dr. Haines Airport - an allocation of \$63,000 for preparation of an airport layout plan. The proposed budget consists of \$56,700 federal, \$3,150 state, and \$3,150 local funds.

LOAN RATES ANNOUNCED

Pursuant to Section 3 of Act 107 of the Public Acts of 1969, as amended, Douglas B. Roberts,

State Treasurer, announced the effective interest rates on municipal and state borrowings for terms as outlined in the Act. The interest rate on loans made during calendar year 2002 is established at 4.5 percent. For further information on municipal and state loans, contact John Dallal at the Bureau of Aeronautics at 517-335-8630 or e-mail dallalj@michigan.gov.

Spirit of Flight Award Announced



The Michigan Business Aircraft Association (MBAA) was honored as the 2001 recipient of the *Spirit of Flight Award* by the Michigan Aviation Hall of Fame. The award was made at the hall of fame's annual enshrinement ceremony on October 6, 2001 in Lansing. Accepting the award for the MBAA are (left to right) Roger Salo, Masco Corporation; Alice J. Gustafson, Michigan Aeronautics Commission; Paul Landers, Alticor Aviation; and Tom Davis, former president, Chrysler Pentastar Aviation. The award is given annually to a Michigan organization or group of individuals whose achievements significantly impact the advancement of aviation and space in service to the citizens of Michigan, the United States and the world.



2002 Great Lakes International Aviation Conference Attracts A Large Crowd

By all accounts, the second annual Great Lakes International Aviation Conference, held January 18-20, 2002, in East Lansing was a great success. More than 800 people took advantage of 170 breakout sessions presented by more than 130 outstanding speakers. An additional highlight of the weekend was an expansive trade show with 81 exhibits from all aspects of the aviation community.

R. A. "Bob" Hoover (top right), who many consider to be the world's finest aviator, headlined the conference. He regaled a standing-room-only crowd with adventures from his 50-year career as a barnstormer, World War II fighter pilot, test pilot, and one of the most sought after air show performers of all time.

Joining Hoover was Dr. Jerry Cockrell (center right), a 13,000-hour pilot, psychologist, and one of the funniest speakers in aviation. The International aviation community knows Dr. Cockrell for his "home-spun" style of conveying important safety information through hilarious anecdotes. His hilarious stories of flying everything from crop dusters to Boeing 747s provided a sampling of his unique crew resource management training.

Saturday evening's entertainment came directly from the Grand Ole Opry. Mike Snider and his band (bottom right) took the stage and kept everyone in stitches with banjo pickin' and down-home country humor. Mike, who spent seven years as a regular cast mem-

ber of the television show "Hee Haw," is nearing his twelfth year as a member of The Grand Ole Opry.

The Great Lakes International Aviation Conference continues to be an exceptional value for anyone involved in aviation. Opportunities to experience the FAA's Vertigon Spatial Disorientation Simulator and to attend Archie Trammell's Airborne Weather Radar Seminar are "world-class." Other sessions, such as *Flying with GPS*, *Aeronautical Charts: Little Known Facts*, *Forward Looking Infrared (FLIR) in GA Aircraft*, and *Sparky Imeson's Flying Safely in the Mountains*, demonstrate the variety and breadth of the safety and operational training available. In addition, 15 hours of training for airframe and power plant technicians, with Inspector Authorization renewal training available, make this conference attractive to a broad audience.

The 2003 edition of the Great Lakes International Aviation Conference will be held on January 17-19, again at the Kellogg Hotel and Conference Center in East Lansing. The conference committee is planning a few changes that will make next year's event even more accessible and educational for everyone. Make your plans to attend now!



Common Terms and Phrases

Abeam-An aircraft is "abeam" when a fix, a point, or an object is approximately 90 degrees to the right or left of the aircraft track. Abeam indicates a general position rather than a precise point.

Abort - To terminate a preplanned aircraft maneuver. (e.g., an aborted takeoff).

Acknowledge - Let me know you have received and understand the message.

Advise intentions - State your plans.

Affirmative-Yes.

Confirm - Is that correct?

Correction - I made a mistake.

Final - Commonly used to mean that an aircraft is on the final approach course or is aligned with the landing area.

Go ahead - State your request (NEVER means "Proceed").

Go around - Instructions for the pilot to abort the approach landing.

Hold - Stop where you are.

Hold short of- Proceed to, but hold short of, the point specified.

Negative - No, or permission not granted, or that is not correct.

Out - Termination of a radio transmission.

Over - My transmission has ended and I expect a response from you.

Proceed - You are authorized to begin or continue moving.

Read back - Repeat the instructions you have received.

Roger - I have received all of your last transmission.

Say again - Repeat what you just said.

Standby - The controller or pilot must pause for a few seconds, usually to attend to other duties of higher priority. If the delay is lengthy, the caller should reestablish contact.

Unable - I can't do it.

Verify - Request confirmation of instruction or transmit correct information.

Wilco - I have received your message, understand it, and will comply. "Roger, Wilco and Out."

DON'T GET LOST IN THE TRANSLATION

Air traffic radio phraseology can sometimes contribute to adverse situations if the person on the receiving end does not comprehend the transmission. It is important that each person moving an aircraft on the airport surface know and understand the phraseology. Use of proper phraseology assures the controller will understand your intentions and that the clearance issued will provide separation from other air traffic on the airport. **When in doubt, ASK.**

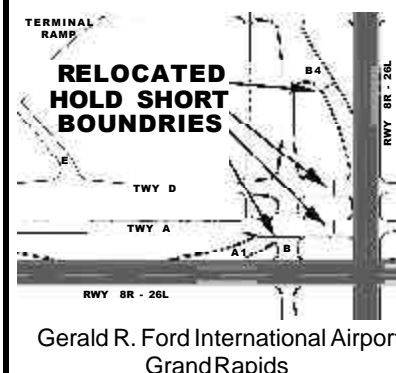
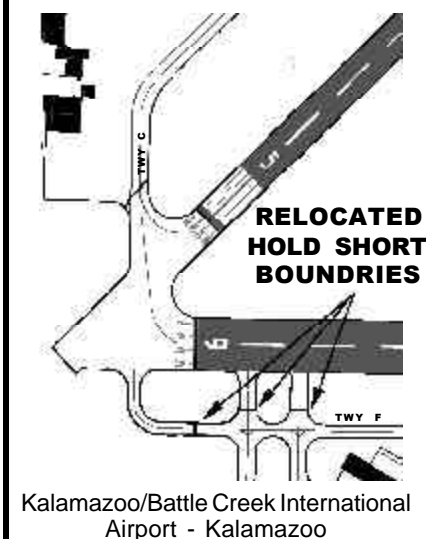
A runway incursion is defined as "Any occurrence at an airport involving an aircraft, vehicle, person or object on the ground that creates a collision hazard or results in loss of separation with an aircraft taking off, intending to takeoff, landing, or intending to land." By definition, an incursion could happen at any airport. The Federal Aviation Administration (FAA) generally acts only on those recorded at tower controlled airports.

Defensive taxiing involves keeping your eyes scanning the signage, traffic at each intersection, and a mental review of instructions at each runway crossing. When the taxi route is less than obvious, request progressive taxi instructions. When operating at non-towered airports, use the same scanning and traffic identification techniques. **Expect the unexpected.**

Air traffic controllers watch more carefully the areas that have a potential for an incursion but they expect pilots to be familiar with airport signs and markings and to adhere to their instructions. If a pilot or airport operator is unable to comply with or understand an instruction, clarification should be sought immediately.

Pilots intending to use an airport with which they are unfamiliar should consider the airport diagram as important a piece of equipment as their aeronautical chart. **Plan ahead.**

Three Michigan airports have recently relocated their Hold Short markings. Arrows indicate location of new markings.



Gregory A. Lyman, a W.K. Kellogg Foundation executive and former Michigan Aeronautics Commission member, has been named as dean of Western Michigan University's College of Aviation, under the foundation's loaned executive program.

Lyman, senior vice president and corporate secretary for the Kellogg Foundation, will take the reins of the college from Dr. Richard A. Wright, who is stepping down for personal and health reasons after serving two years. WMU President Elson S. Floyd made the announcement on January 7, 2002 at a college-wide meeting held at WMU's aviation facilities in Battle Creek.

The Kellogg Foundation has agreed to an arrangement through which Lyman will be on loan to the University. The foundation encourages staff members to be involved in community non-profit activities and permits executive loans where they may be helpful to an organization. Lyman will retain his Kellogg Foundation position while serving as dean, but expects to redistribute some of his foundation responsibilities in order to create the time needed for his new WMU role.

Lyman has been heavily involved with the College of Aviation for a number of years and currently serves as chairperson of the college's corporate advisory panel. He was instrumental in putting together the community/foundation/University partnership that brought what was then the School of Aviation Sciences to Battle Creek in 1997. He also was heavily involved with University officials in negotiating such developments as the establishment of an international pilot training program that has served a number of international clients and the college's new domestic training agreement with Delta Air Lines.

A licensed pilot and certified flight instructor, Lyman is a past member

of the Michigan Aeronautics Commission and is currently a member of the W.K. Kellogg Airport Advisory Board in Battle Creek. A 1968 alumnus of WMU, Lyman earned a bachelor's degree in political science. He also holds a master's degree in urban planning from Michigan State University. A Kellogg Foundation staff member since 1988, Lyman held a variety of administrative and programmatic positions before assuming his current duties. He also has held a variety of positions with the Michigan Department of Natural Resources and the Michigan Legislative Service and has lectured at MSU.

The U.S. House of Representatives Aviation Subcommittee has unanimously approved H.R.3347, the *General Aviation Industry Repairs Act of 2001*, which provides \$7.5 billion in financial relief to help the general aviation industry. The bill provides \$5 billion in loans and \$2.5 billion in grants to general aviation businesses for direct losses incurred beginning on September 11 as a result of any federal air traffic ground stop order and for incremental losses incurred beginning on September 11 and ending December 31, 2001 as a direct result of the attacks. Priority will be given to a general aviation entity based on the length of time that they have been unable to operate. The bill also allows general aviation airports and businesses to qualify for war risk insurance. It now will go to the full House Transportation and Infrastructure Committee for consideration.

A Senate version of the bill (S. 1552, the *General Aviation Small Business Assistance Act*), which was originally proposed in October, calls for \$400 million in relief. It provides financial assistance in the form of grants through the Small Business Administration for direct and incremental losses incurred by the September 11 terrorist attacks. No action had been taken on this bill prior to the Senate's holiday recess.

As we go to press, word is that publication of the much-anticipated Sport Pilot proposal is imminent. The Notice of Proposed Rule making (NPRM) has left the Office of Management and Budget (OMB) and is

back with the FAA. Following publication, there will be a 90 day public comment period. The NPRM will contain the complete proposed technical language for both the new sport pilot certificate and light aircraft category. According to Tom Poberezny, president of the Experimental Aircraft Association, "one of the most significant aviation measures in the last 50 years." It will affect numerous sections of the Federal Aviation Regulations in every area from training to medical certification to manufacturing.

On December 11, 2001, Detroit Metropolitan Wayne County Airport became the only major airport in the nation to open a runway - this year or next. The next major airport scheduled to open a new runway is Miami International in May, 2003. The new runway was unveiled at a ceremony hosted by Wayne County Executive Edward H. McNamara, and officially dedicated by FAA Administrator Jane F. Garvey.

The 10,000-foot, \$225 million runway - officially commissioned as Runway 4L/22R - gives Detroit Metro Airport a total of six runways. It's estimated that the new runway will reduce air traffic control delays by 3,000 hours annually, and handle the airport's forecast needs through the year 2025. With six runways - four of them parallel - Detroit's peak time capacity will rank it among the top airports in the world, including Atlanta, Chicago, Los Angeles and Denver.

Runway 4L/22R first appeared on the airport's master plan over a decade ago. In the current regulatory climate, it takes about ten years for an airport to build a new runway, according to Executive McNamara. "Our long-range planning has helped ensure that Metro Airport's airfield has kept pace with current demand, and also positioned the airport for the future," he said.

The addition of Runway 4L/22R is particularly important for Metro Airport's hub carrier, Northwest Airlines. With a hub carrier, aircraft arrivals and departures tend to come in alternating waves, making airfield capacity that much more important.



Federal Aviation Regulations (FAR) specifies the requirements to operate an aircraft or vehicle on an airport with an operating control tower. The Aeronautical Information Manual (AIM) further clarifies airport operations and the responsibilities of operators.

FAR 91.129(i) Takeoff, landing, taxi clearance. No person may, at any airport with an operating control tower, operate an aircraft on a runway or taxiway, or take off or land an aircraft, unless an appropriate clearance is received from ATC. A clearance to "taxi to" the takeoff runway assigned to the aircraft is not a clearance to cross that assigned takeoff runway, or to taxi on that runway at any point but is a clearance to cross other runways that intersect the taxi route to that assigned takeoff runway. A clearance to "taxi to" any point other than an assigned takeoff runway is clearance to cross all runways that intersect the taxi route to that point.

AIM 4-3-18. TAXIING

a. General: Approval must be obtained prior to moving an aircraft or vehicle onto the movement area during the hours an Airport Traffic Control Tower is in operation.

1. Always state your position on the airport when calling the tower for taxi instructions.

2. The movement area is normally described in local bulletins issued by the air-

port manager or control tower. These bulletins may be found in FSS's, fixed base operators offices, air carrier offices, and operations offices.

3. The control tower also issues bulletins describing areas where they cannot provide ATC service due to nonvisibility or other reasons.

4. A clearance must be obtained prior to taxiing on a runway, taking off, or landing during the hours an Airport Traffic Control Tower is in operation.

5. When ATC clears an aircraft to "taxi to" an assigned takeoff runway, the absence of holding instructions authorizes the aircraft to "cross" all runways which the taxi route intersects except the assigned takeoff runway. It does not include authorization to "taxi onto" or "cross" the assigned takeoff runway at any point. In order to preclude misunderstandings in radio communications, ATC will not use the word "cleared" in conjunction with authorization for aircraft to taxi.

6. In the absence of holding instructions, a clearance to "taxi to" any point other than an assigned takeoff runway is a clearance to cross all runways that intersect the taxi route to that point.

7. Air traffic control will first specify the runway, issue taxi instructions, and then state any required hold short instructions, when authorizing an aircraft to taxi for departure. This does not authorize the

aircraft to "enter" or "cross" the assigned departure runway at any point.

NOTE - Air traffic controllers are required to obtain from the pilot a readback of all runway hold short instructions.

8. Pilots should always read back the runway assignment when taxi instructions are received from the controller. Controllers are required to confirm the runway hold-short assignment when they issue taxi instructions.

b. ATC clearances or instructions pertaining to taxiing are predicated on known traffic and known physical airport conditions. Therefore, it is important that pilots clearly understand the clearance or instruction. Although an ATC clearance is issued for taxiing purposes, when operating in accordance with the Code of Federal Regulations, it is the responsibility of the pilot to avoid collision with other aircraft. Since "the pilot-in-command of an aircraft is directly responsible for, and is the final authority as to, the operation of that aircraft," the pilot should obtain clarification of any clearance or instruction which is not understood.

Pilots, mechanics, fuel service, and airport maintenance personnel must follow ATC instructions to avoid incidents which can result in a runway incursion.

Understanding and applying the proper phraseology is the first step in preventing runway incursions. Step two is knowing and understanding airport signs and markings.

Familiarize yourself with the actions and purpose of specific signs for operation on the airport.

Step three is use of an airport taxi diagram. Knowing your position, route to taxi, and any holding points along route is important to anticipate and obey holds. This is especially important at unfamiliar airports and during darkness, reduced visibility, or snow reduced marking visibility.

The use of current airport diagrams is extremely important. In the past two years, construction at Detroit Metro, Flint, Grand Rapids, and Jackson have added, removed, and renamed taxiways. More changes can be expected as airports are improved and expanded.

GUIDE TO AIRPORT SIGNS AND MARKINGS

	AIRPORT SIGN	PAVEMENT MARKING	BACK OF SIGN	
MANDATORY INSTRUCTION SIGNS				
RUNWAY APPROACH HOLD POSITION: Hold Short for Aircraft on Approach				HOLD POSITION BOUNDARY: Exit Boundary of Runway Protected Areas
TAXIWAY/RUNWAY HOLD POSITION: Hold Short of Runway on Taxiway				HOLD POSITION BOUNDARY: Exit Boundary of Runway Protected Areas
RUNWAY/RUNWAY HOLD POSITION: Hold Short of Intersecting Runway				HOLDING POSITION: Hold Short of Intersecting Runway. Also Land and Hold Short Marking
ILS HOLD POSITION: Hold Short of ILS Critical Area during IMC				ILS CRITICAL AREA BOUNDARY: Exit Boundary of ILS Critical Area
NO ENTRY: Identifies Paved Areas Where Aircraft Entry Is Prohibited		N/A	N/A	
LOCATION SIGNS and MARKINGS				
TAXIWAY LOCATION: Identifies Taxiway on Which Vehicle/Aircraft is Located				
RUNWAY LOCATION: Identifies Runway on Which Vehicle/Aircraft is Located		N/A		
GUIDANCE SIGNS and MARKINGS				
TAXIWAY/TAXIWAY HOLDING POSITION: Hold Short of Intersecting Taxiway When Directed by ATC				* Surface painted Hold, Direction, and Position signs NOT painted on all taxiways.
TAXIWAY Direction: Defines Direction & Designation of Intersecting Taxiway(s)				
RUNWAY EXIT: Defines Direction & Designation of Exit Taxiway from Runway		N/A		
OUTBOUND DESTINATION: Defines Direction to Take-Off Runways				
INBOUND DESTINATION: Defines Direction for Arriving Aircraft				
TAXIWAY ENDING MARKER: Indicates Taxiway Does Not Continue				
OTHER TAXIWAY MARKINGS				
MOVEMENT AREA BOUNDARY: Defines Boundary of Movement Area and Non-Movement Area				
Defines Edge of Usable Full Strength Taxiway Pavement. Adjoining Pavement NOT Usable				
Defines Edge Taxiway where adjoining Pavement or Apron IS Available for Taxi				